Department of Commerce • National Oceanic & Atmospheric Administration • National Weather Service

NATIONAL WEATHER SERVICE INSTRUCTION 10-304
JULY 5, 2006

Operations and Services

Marine And Coastal Weather Services, NWSPD 10-3

MARINE AND COASTAL SERVICES COMMUNICATION/DISSEMINATION

NOTICE: This publication is available at: http://www.nws.noaa.gov/directives/.

OPR: OS21 (T. Rulon) **Certified by:** OS21 (T. Pierce)
Type of Issuance: Routine

SUMMARY OF REVISIONS: This directive supersedes NWSI 10-304, dated July 16, 2004. This revision requires WFO's to inform W/OS21 of changes to NOAA Weather Radio programming, adds VTEC, clarifies that CCODE 2: only applies for next 48 hours, and contains other minor revisions.

signed June 21, 2006

Dennis H. McCarthy Date
Director, Office of Climate,
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MARINE AND COASTAL SERVICES COMMUNICATION/DISSEMINATION

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1. Purpose. To have any value, NWS marine weather products must be received by users. To this end, they are made available through a wide variety of dissemination vehicles outlined in this instruction. A complete discussion of the communication requirements and formats is given in NWSI 10-1701.

2. Responsibilities. To ensure NWS marine weather products are effectively processed and disseminated, offices issuing these will ensure their products are clear, properly disseminated, and properly formatted.

3. Product Header Formats. Except as noted in 3.11.1, all marine products issued by the NWS will have common product headers. Included in these are:

(WMO ID)(ISSUANCE TIME)(AMENDMENT/CORRECTION IDENTIFIER)
(AWIPS ID)

PRODUCT NAME [+ Optional descriptor]
NATIONAL WEATHER SERVICE (CITY)(STATE)(or OFFICE ID)
(VALID TIME) AM/PM (TIME ZONE)(DAY)(DATE-MON DAY YEAR))
[Refer to NWSI 10-1701 for further guidance on headers.]

3.1 World Meteorological Organization (WMO) Identifier(ID). The WMO has established a scheme used throughout the world for identifying meteorological products. These codes are defined in WMO Manual 386. Each alphanumeric marine product issued by the NWS will have an appropriate WMO header.

3.2 Issuance Time. This time is automatically placed on every product transmitted.

3.3 Amendment/Correction Identifier. This is a three letter code to denote if a product has been non-routinely amended (AAX) or corrected (CCX). Use separate letters to denote more than one change (e.g. CCA, CCB, CCC).

3.4 Automated Weather Interactive Processing System (AWIPS) ID. Each NWS alphanumeric product has been assigned a 6 letter identifier (see Appendix A). Each alphanumeric marine product issued by the NWS will include an appropriate AWIPS ID.

3.5 Product Name. This is the common phrase describing what the product is (e.g., COASTAL WATERS FORECAST). Each alphanumeric marine product issued by the NWS will include an appropriate product name.

3.6 City/State. Each alphanumeric marine product issued by the NWS will include the appropriate city and state in which the office issuing the product is located.

3.7 Office ID. The forecast branches of the TPC and OPC should include their office identifiers in this location.

3.8 Issuance Date/Time . The date/time the product was issued in local time. In products that span multiple time zones, the date/time may be shown in UTC, rather than local time. For high seas forecasts broadcast via SafetyNET, a modified header format is used and the date/time should reflect the scheduled broadcast time of the forecast.

3.9 Universal Generic Code (UGC) Codes. In the coastal and offshore waters and Great Lakes, all marine zones have been assigned UGCs as noted in NWSI 10-302. Forecasts, statements, and warnings including these areas will contain the UGC code line identifying the marine zones impacted by the product. As in NWSI 10-1702, the format of this line is: (UGC CODE[S])-(EXPIRATION TIME)-

3.10 VTEC CODES. When required, VTEC line(s) will be included on the line immediately below the UGC Code line as in NWSI 10-1703. The current VTEC-enabled NWS product suite, along with other information regarding implementation of VTEC, is available on the Internet at http://www.nws.noaa.gov/os/vtec/.

3.11 SafetyNET Format. SafetyNET is an international satellite system for disseminating high seas information. The areas of high seas forecasts are explicitly defined by the WMO and will not be modified without prior coordination with NWS headquarters, Office of Climate, Water, and Weather Services.

3.11.1 CCODES. To control product dissemination of high seas forecasts broadcast via SafetyNET, a system of "C codes" is used. It is vital this modified communications header format be followed explicitly. C codes take the following form and are located as in the following example:

FZNT01 KWBC 282207
HSFAT1

CCODE/C_1:C_2:C_3:C_4:C_5/SAT/NWS/CCODE
HIGH SEAS FORECAST FOR METAREA IV
NATIONAL WEATHER SERVICE WASHINGTON DC/TPC MIAMI FL
OCEAN PREDICTION CENTER/OFB 2230 UTC MAR 28 2003
SUPERSEDED BY NEXT ISSUANCE IN 6 HOURS

(TEXT)

For routine HSFs:
NFDHSFAT1 - CCODE/1:31:04:01:00/AOW/NWS/CCODE
NFDHSFEPI - CCODE/1:31:12:01:00/AOW+POR/NWS/CCODE
MIAHSFEP3 - CCODE/1:31:16:01:00/AOW/NWS/CCODE

For HSFs containing hurricane/typhoon warnings within 48 hours of the synoptic time:
NFDHSFAT1 - CCODE/2:31:04:11:00/AOW+AOE/NWS/CCODE
NFDHSFEPI - CCODE/2:31:12:11:00/AOW+POR+AOE/NWS/CCODE
NFDHSFEP3 - CCODE/2:31:16:11:00/AOW+POR+AOE/NWS/CCODE

HSFs: HSFSP, HSFNP, HSFEP1, HSFEP2, and HSFAT2 are not broadcast individually over SafetyNET and use standard communication headers which will not contain CCODES, or the notation of METAREA.

3.11.2 Issuance Times

HSFs issued by TPC or OPC, are broadcast via SafetyNET as shown below:

METAREA	Product ID	Satellite(s)	Broadcast Time (UTC)*
IV (Atlantic)	NFDHSFAT1	AOW	0430,1030,1630,2230
XII (Pacific)	NFDHSFEPI	AOW+POR	0545,1145,1745,2345
XVI (Off Peru)	MIAHSFEP3	AOW	0515,1115,1715,2315

* - For proper operation of the SafetyNET "HIGHSEAS" transmission and monitoring system within the NWS Telecommunications Gateway (NWSTG), these products should be issued no earlier than 1 hour before the scheduled broadcast time or later than the scheduled broadcast time.

4. Communication Systems. Marine products are disseminated through a variety of systems. Among these are NOAA Weather Radio; USCG and other Governmental and commercial radio stations, Navigational Teleprinter Exchange (NAVTEX), Simplex Telephone Exchange Over Radio (SITOR) and radiofacsimile broadcasts; Internet and other computer to computer systems; and satellite based systems such as SafetyNET and the Emergency Managers Weather Information Network (EMWIN). Complete information on these systems can be found via the NWS Marine Forecasts webpage http://www.nws.noaa.gov/om/marine/home.htm. Other systems may be added with coordination through NWS Headquarters, Office of Operational Systems. Several of the most widely used marine dissemination systems are described below.

4.1 NOAA Weather Radio (NWR). NWSI 10-1710 provides overall policy on the NWR. The marine portion of the NWR program should routinely include the latest forecasts for marine areas within the radio's broadcast area and a summary of local area marine observations. Marine warnings and advisories should be emphasized. Additional information, such as offshore waters forecasts, oceanographic conditions, tidal data, etc., may be included based on local user requirements. The amount and content of the marine products broadcast over the NWR may be adjusted according to the time of day and season.

Special marine warnings affecting any part of a NWR listening area should be immediately placed in the broadcast cycle and warning alarms used as appropriate. Broadcast of other non-routine marine products is at the discretion of the local office manager based on local user

requirements. Broadcasts of emergency marine information, such as MAYDAYS, should be consistent with NWR policy governing such broadcasts for land-based emergencies.

4.1.1 NOAA Weather Radio SAME

The following will be broadcast via NWR using the listed SAME event codes and SAME codes listed at http://www.nws.noaa.gov/geodata/catalog/wsom/html/marinenwreas.htm in accordance with NWSI 10-1710. Weather Forecast Offices should periodically review as well as immediately inform W/OS21 of any changes to NOAA Weather Radio programming as listed at http://www.nws.noaa.gov/om/marine/marsame.htm by sending corrections via e-mail to; marine.weather@noaa.gov

EVENT	SAME EVENT CODE
Hurricane Watch*	HUA
Hurricane Warning*	HUW
Hurricane Local Statement*	HLS
Severe Thunderstorm Watch	SVA
Special Marine Warning	SMW
Tornado Watch	TOA
Tropical Storm Watch*	TRA
Tropical Storm Warning*	TRW
Tsunami Watch#	TSA
Tsunami Warning#	TSW

* Not applicable to Great Lakes and Alaska forecast areas
\# Not applicable to Great Lakes

4.2 USCG Radio Broadcasts. The U.S. Coast Guard (USCG) is a prime disseminator of marine weather information for the U.S. via high frequency (HF), medium frequency (MF) and very high frequency (VHF) voice, NAVTEX, SITOR, and radiofacsimile (U.S. Navy in Hawaii). Lists of NWS products and broadcast schedule information are available under the NWS Marine Forecasts webpage http://www.nws.noaa.gov/om/marine/home.htm. The USCG receives NWS text forecasts via the NOAA Weather Wire System (NWWS), using the Internet as a backup.

4.3 WWV/WWVH HF Voice (Time Tick). Brief recorded statements on major storm systems are prepared and recorded by the offices listed below for hourly broadcast over the time and frequency radio stations WWV (Boulder, Colorado) and WWVH (Honolulu) operated by the National Institute of Standards and Technology.

From WWV, Atlantic high seas warnings are broadcast at 7 and 8 minutes past the hour while Pacific high seas warnings are broadcast at 9 minutes past the hour.

From WWVH, Pacific high seas warnings are broadcast from 48 to 51 minutes past the hour.

STATION	AREA	OFFICE

WWV	Western North Atlantic Gulf of Mexico Caribbean Sea	OPC
WWVH	Eastern Pacific North Pacific Tropical South Pacific	Weather Forecast Office (WFO) Honolulu

The script is a brief summary describing the location and movement of storms producing, or expected to produce, gale, storm, or tropical cyclone force winds and associated seas. This service is intended to supplement the primary marine weather broadcasts that give more complete information. When time permits, add the following:

"More complete information is available from other marine broadcast stations."

4.4. Internet. The Internet, should, as much as possible, provide access to all NWS marine weather products, text and graphic. Each WFO and National Center should maintain a marine webpage providing such information as local forecasts, tide predictions, and local observations.

Links to NWS marine products may be found on the NWS Marine Forecasts webpage at http://www.nws.noaa.gov/om/marine/home.htm.

4.5 FTPMAIL. NWS radiofax charts, marine text products and buoy/C-MAN observations are available via e-mail. The FTPMAIL server will be maintained by NWS headquarters and is intended to allow Internet access for mariners and other users who do not have direct access to the World Wide Web but who are equipped with an e-mail system. For the FTPMAIL "help" file see: http://weather.noaa.gov/pub/fax/ftpmail.txt

4.6 Digital Marine Weather Dissemination System (DMAWDS). DMAWDS is a computer-to-computer system housed at WFO Cleveland directed to Great Lakes users. Volunteer Observing Ship (VOS) participants and other users authorized by WFO Cleveland receive products from it. The Cleveland staff will maintain this system.

4.7 Great Lakes Faxback. WFO Cleveland also houses the Great Lakes Faxback system whereby VOS participants and other users authorized by WFO Cleveland can receive selected weather products via facsimile. The Cleveland staff will maintain this system.

4.8 SafetyNET Inmarsat-C SafetyNET is an internationally adopted, automated satellite system for disseminating weather forecasts and warnings, marine navigational warnings and other safety related information to all types of vessels. Along with NAVTEX, it is part of the Global Maritime Distress and Safety System(GMDSS).

4.9 Other Dissemination Systems NWS marine products are distributed by other means including several common to other NWS forecasts including telephone recordings, NWWS, EMWIN, NOAAPORT, etc. For more detailed information see the NWS Marine Forecasts webpage at http://www.nws.noaa.gov/om/marine/home.htm.

APPENDIX A - Text Marine Product List by AWIPS ID

XXX is the three letter identifier of the office issuing the product; VVV is a two or three letter identifier designating specific areas for the High Seas, NAVTEX, or Offshore Waters Forecasts; ZZ is a two letter identifier designating a specific Great Lake for the Open Lake Forecast; and YYY is a three letter identifier of the appropriate ocean (PAC (Pacific) or ATL (Atlantic)) for the Marine Weather Discussion.

PRODUCT	AWIPS IDENTIFIER
Coast Guard Reports-	CGRXXX
Coastal/Lakeshore Hazard Msg	CFWXXX
Coastal Waters Forecast -	CWFXXX
Open Lakes Forecast -	GLFZZ
Storm Summary -	GLSCLE
High Seas Forecast -	HSFVVV
Marine Alert -	MAWCLE
Marine Weather Discussion -	MIMYYY
MAROB Observations-	MOBXXX (experimental)
Marine Weather Statement -	MWSXXX
Nearshore Forecast -	NSHXXX
NAVTEX Forecast -	OFFVVV
Offshore Forecast -	OFFVVV
Other Marine Observations-	OMRXXX
Plain Language Ship Reports-	PLSXXX
Special Marine Warning -	SMWXXX
Surf Zone Forecast -	SRFXXX
Tide Reports-	TIDXXX